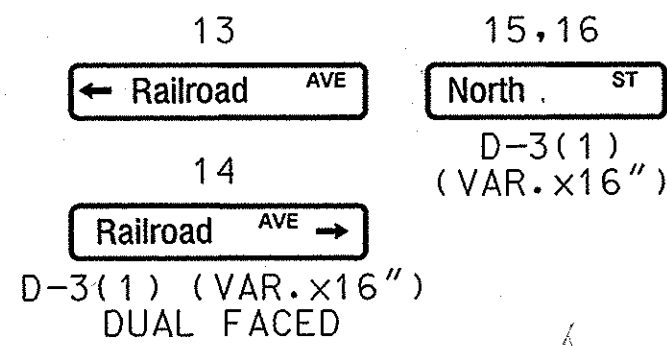
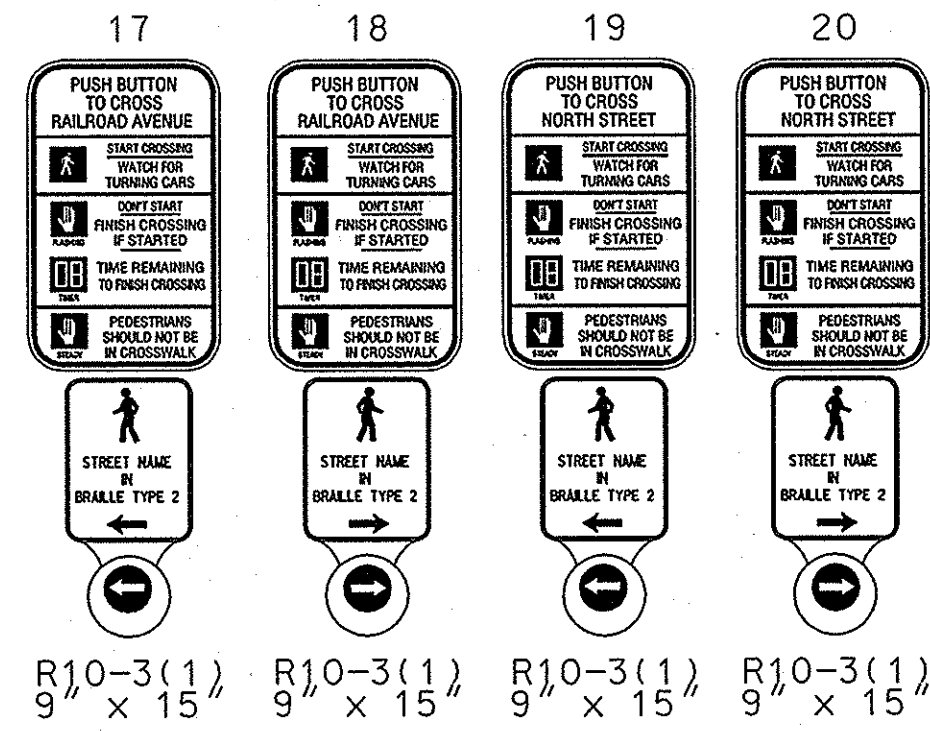




MD 268 IS ASSUMED TO RUN  
IN A NORTH-SOUTH DIRECTION



#### PROPOSED SIGNS



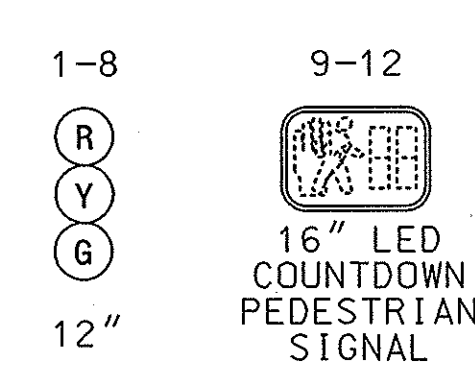
#### EXISTING SIGNS TO BE REMOVED



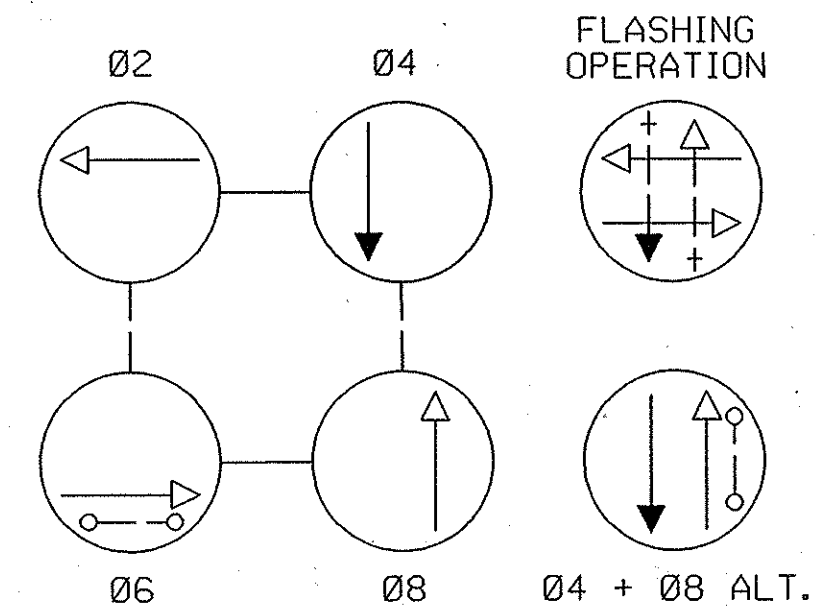
#### PROPOSED VIDEO DETECTION CAMERA



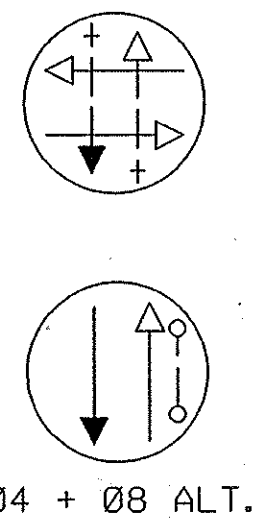
#### PROPOSED SIGNALS



#### NEMA PHASING



#### FLASHING OPERATION

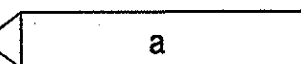


NOTE:  
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.  
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

#### SPECIAL NOTES:

THE CONTRACTOR SHALL NOT BLOCK VIEW OF EXISTING  
SIGNAL INDICATIONS DURING INSTALLATION OF MAST ARM.  
IF NEW MAST ARM CANNOT BE INSTALLED DUE TO CONFLICT  
WITH EXISTING SIGNAL INDICATIONS OR SPAN WIRES, A  
SIGNAL OUTAGE SHALL OCCUR DURING NON-PEAK HOURS  
AS DIRECTED BY THE ENGINEER.

#### VIDEO ZONE DETECTION



MD 268 (North Street)

#### CONSTRUCTION DETAILS

- INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH A 60 FT. MAST ARM. TRAFFIC SIGNAL HEADS, VIDEO DETECTION CAMERAS MOUNTED ON MAST ARMS, COUNTDOWN PEDESTRIAN SIGNAL HEAD, SIGNS AND 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
- INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT, R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS RAILROAD AVENUE"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
- INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE, COUNTDOWN PEDESTRIAN SIGNAL HEADS, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT, R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS RAILROAD AVENUE"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
- INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE (CUT TO 5 FT.) WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS NORTH STREET"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).
- INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE (CUT TO 5 FT.) WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801.01-01, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS NORTH STREET"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).
- INSTALL NEMA SIZE "6" BASE MOUNTED CONTROLLER AND CABINET WITH CONCRETE PAD. (INSTALL 2-2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN CABINET BASE.)
- INSTALL BASE MOUNTED METERED SERVICE PEDESTAL WITH 2-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC CONDUIT BENDS IN PEDESTAL BASE.
- INSTALL HANDHOLE. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - SLOTTED.
- INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE AND 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT FOR PROPOSED UNDERGROUND TELEPHONE SERVICE IN COMMON SLOT. CAP AND MARK CONDUITS 2 FT. ABOVE GRADE AT UTILITY POLE FOR USE BY OTHERS.
- INSTALL 4 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE.
- INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE.
- INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.
- INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
- INSTALL SIDEWALK RAMP (STANDARD NO. MD 655.12) AND DETECTABLE WARNING SURFACE (STANDARD NO. MD 655.40).
- REMOVE EXISTING SIDEWALK RAMP AND INSTALL 5 IN. CONCRETE SIDEWALK AND COMBINATION CONCRETE CURB AND GUTTER (STANDARD NO. MD 620.02 TYPE 'A').
- REMOVE EXISTING STRAIN POLE AND POLE MOUNTED CABINET AND CONTROLLER. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL. SHA SIGNAL SHOP SHALL BE NOTIFIED TO REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CABINET.
- REMOVE EXISTING STRAIN POLE AND PEDESTRIAN SIGNAL HEAD. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
- REMOVE EXISTING HANDHOLE.
- CAP AND ABANDON EXISTING CONDUIT.
- ABANDON EXISTING LOOP DETECTOR. DISCONNECT AND REMOVE LOOP DETECTOR CABLES FROM CONDUITS, HANDHOLES, SIGNAL STRUCTURES AND CONTROLLER.
- REMOVE EXISTING SPAN WIRE AND ALL ASSOCIATED EQUIPMENT.
- INSTALL 5 INCH CONCRETE SIDEWALK.
- REMOVE EXISTING STREET BLADE AND SUPPORT.
- RELOCATE EXISTING "WELCOME TO ELKTON" SIGN AS SHOWN.
- REMOVE EXISTING R1-1 AND "RIGHT TURN ONLY" SIGNS AND SUPPORT.
- REMOVE EXISTING PEDESTRIAN SIGNAL HEADS BANDED TO UTILITY POLE.
- REMOVE EXISTING PAVEMENT MARKINGS.

|           |        |
|-----------|--------|
| TELEPHONE | 22'-4" |
| CABLE     | 23'-2" |
| NEUTRAL   | 23'-2" |
| PRIMARY   | 33'-6" |
| PRIMARY   | 40' +  |

|             |         |
|-------------|---------|
| NEUTRAL     | 20'-4"  |
| NEUTRAL     | 21'-0"  |
| TELEPHONE   | 20'-10" |
| CABLE       | 23'-2"  |
| NEUTRAL     | 23'-2"  |
| SECONDARY   | 27'-3"  |
| FIBER OPTIC | 29'-6"  |
| PRIMARY     | 33'-8"  |
| PRIMARY     | 40' +   |

|             |         |
|-------------|---------|
| TELEPHONE   | 16'-0"  |
| NEUTRAL     | 19'-10" |
| NEUTRAL     | 20'-8"  |
| CABLE/SPAN  | 21'-6"  |
| SECONDARY   | 24'-6"  |
| FIBER OPTIC | 28'-6"  |
| PRIMARY     | 39'-11" |

#### GENERAL NOTES

- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
- VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
- ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
- ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
- PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" x 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
- PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
- INSTALL CONDUIT PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS.
- VERIFY PROPOSED GEOMETRICS PRIOR TO INSTALLING SIGNAL EQUIPMENT.
- ALL HANDHOLES SHALL BE INSTALLED AT FINAL GRADE.
- REFER TO SHEET 2 FOR DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.

TOD # AT909-31  
SHA# CE399A56/B56



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 268 (North Street) and Railroad Avenue  
Elkton, MD

#### TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' DATE 10/29/1999 CONTRACT NO. C-502-275

|                  |                 |
|------------------|-----------------|
| DESIGNED BY      | Cecil           |
| DRAWN BY         | J.S.H. Killian  |
| CHECKED BY       |                 |
| FAP NO.          | See Title Sheet |
| TS NO. 61 D      | DRAWING - OF    |
| SHEET NO. 1 OF 2 |                 |

| GEOMETRIC LEGEND |
|------------------|
| EXISTING         |
| PROPOSED         |

| UTILITY LEGEND       |
|----------------------|
| SO - STORM DRAIN     |
| G - GAS MAIN         |
| W - WATER MAIN       |
| S - SEWER MAIN       |
| E - ELECTRIC CABLES  |
| A - AERIAL CABLES    |
| T - TELEPHONE CABLES |
| F - FIBER-OPTIC      |

**WR&A**  
Whitman, Requardt and Associates, LLP  
Engineers, Architects and Planners  
801 South Caroline Street  
Baltimore, Maryland 21231  
410-235-3450

| APPROVALS        |
|------------------|
| TEAM LEADER      |
| ASST. DIR. CHIEF |
| DIVISION CHIEF   |
| OFFICE DIRECTOR  |

| REVISIONS   |
|---|
| RECONSTRUCT EXISTING TRAFFIC SIGNAL<br>CONTRACT NO. AT9095185 5/14/2008   |
| SRB NML   |
| INSTALLED NEW LOOP DETECTOR FOR RIGHT TURN LANE<br>SHA NO. CE 614-501-225 |
| DA XX   |
| REPLACE SIGNALS, LOOPS, AND CABLE<br>CONTRACT NO. CE-614-501-285          |

PLOTTED: 06-20-2008  
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